

## **Soil conservation in Burkina Faso: is international cooperation effective?**

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Challenges related to Soil and Water Conservation (SWC) have been documented in Burkina Faso for many decades so far. The ever-growing population of this country, a landlocked desertification-prone one, is daily facing the visible impact of increasingly intense rainfall and concentrated rainy days. Agricultural soil erosion and reservoir siltation are two of the main issues affecting Burkina Faso subsistence agriculture sector, whose revenues largely contribute to people's income. From the sixties onwards locally-developed SWC techniques (e.g. permeable rock dams and gabion check dams) have been widely, though geographically variably, employed in the country. The effectiveness of these techniques in locally increasing soil moisture and reducing soil erosion is well proven, while their long term effect in decreasing the reservoir siltation is still under debate and shall be addressed with a whole-catchment approach often overlooked by international donors.

This research aims to analyze the history of the use of these techniques by reviewing the results of several cooperation projects that dealt with the implementation of nearly 200 conservation works. These case studies are representative of 5 out of 12 regions of Burkina Faso and span over two decades. Local people levels of (i) awareness, (ii) technique appropriation, (iii) involvement and the degree of (iv) effectiveness and (v) maintenance of these SWC works have been taken into account. The analysis of the afore-mentioned five indicators let the authors draw a list of features that are needed for this kind of projects to be successful in the SWC domain. Moreover the differences that exist between the approach to the community-works, normally employed for SWC realizations, of different ethnical groups is highlighted. The degree of degradation of the environment also plays an important role in the involvement of the local community together with the familiarity of the population with these techniques. For instance in the South-Western region these techniques were applied for the first time by one of the project here analyzed, leading to mixed results that strongly depended on villages ethnical composition. Indeed, some of these projects proved unsuccessful for these techniques not being enough rooted in the local habits or for the lack of environmental local organizations to serve as means to gain the trust of local people. The latter conclusion is partially related to the undeniable perturbation that the international cooperation introduced by trying to "institutionalize" traditional practices. The history of the burkinabé tradition of kombi-naam (i.e. literally "power of the youngsters") and the evolution of these farmers organizations for them to later become partners of international NGOs, is quite explicative of the well-developed dynamics between donors and beneficiaries that can currently be observed.